VOLUME 27 1987

SUBJECT INDEX

Acetylcholine release, 491
  amnesia
  aniracetam
  drug interactions
  oxiracetam
  scopolamine
Acoustic startle, 749
  diethylpropion
  fenfluramine
  phentermine
  phenylpropanolamine
Acquisition, 483
  radial maze performance
  scopolamine
  spatial maze
  strain differences
$ACTH_{4-10}$, 133
  learning performance
  long-term effects
  neonatal exposure
Adiposity, 223
  castration
  chickens
  sex differences
  strain differences
  testosterone
β1 Adrenergic receptors, 21
  β2 adrenergic receptors
  hypothermia
  reserpine
β2 Adrenergic receptors, 21
  β1 adrenergic receptors
  hypothermia
  reserpine
Age differences
  body weight, 7
  data management, 545
  locomotor activity, 545
  microcomputer, 545
  nipple attachment, 7
  serotonin, 7
Aggression, 641
  attack
  attack inhibition
  ethanol
Aggression, female, 645
  ethanol
  opponent size
Alcohol preference, 317
  brain monoamines
  inbred strains
Ambient temperature, 431
  amphetamine
  autonomic thermoregulation
  behavioral thermoregulation
Ambulation, 359
  exploratory behavior
  grooming
  imipramine chronic
  novel environment
  social isolation
Amnesia, 491
  acetylcholine release
  aniracetam
  drug interactions
  oxiracetam
  scopolamine
Amphetamine
  ambient temperature, 431
  area postrema, 677
  ascorbic acid labels, 231
  autonomic thermoregulation, 431
  behavioral thermoregulation, 431
  combined treatment, 677
  conditioned taste aversion, 677
  continuous reinforcement, 205
  environment-specific conditioning, 61
  extinction, 205
  haloperidol, 231
  horizontal activity, 61
  intracranial administration, 113
  in vivo, 231
  nonreinforcement, 205
  open field, 113
  partial reinforcement, 205
  radiation, 677
  sensitization, 61
  stereotyped behavior, 113
  uric acid levels, 231
  vertical activity, 61
d-Amphetamine
  l-amphetamine, 649
  dopaminergic substrate, 649
  drug comparisons, 649
  drug interactions, 165
  food competition, 707
  food intake, 649
  hypermotility, 165
  methylphenidate, 513
  metoclopramide, 165
  rats, male, 707
  route of administration, 165
  stereotypy, 165
  timing, 513
l-Amphetamine, 649
  d-amphetamine
  dopaminergic substrate
  drug comparisons
  food intake
Amytriptyline, 105
  body weight
  chronic administration
  desipramine
  food intake
  tricyclic antidepressants
Analgesia
  catalepsy, 611
  dopaminergic system, 457
  estrogen, 611
  hyperactivity, 611
  lesions, electrical, 457
  morphine, 457, 611
  ovariectomy, 611
  U-50,488H, 457
Anatomical mapping, 177
  anorexia
  calcitonin
  hypothalamus
Anhedonia
  consummatory behaviors, 341
  lever pressing, 67
  motor deficit, 341
  neuroleptics, 341
  operant behaviors, 341
  pimozide, 67
  rats, nondeprived, 67
  sucrose reward, 67
Animal models, 385
  drug reinforcement
  phencyclidine
  phencyclinoids
  self-administration, intravenous
Aniracetam, 491
  acetylcholine release
  amnesia
  drug interactions
  oxiracetam
  scopolamine
Anorectic drugs, 291
  2-deoxy-D-glucose
  deprivation-induced feeding
  glucoprivic-feeding
  site of action
Anorexia, 177
  anatomical mapping
  calcitonin
  hypothalamus
Antiaversive effects, 437
  antiemetic effects
  aversive effects
  conditioned taste aversion
  drug interaction
  opioid receptor agonists
Anticholinergics, 81
  cholinergics
  conditioned taste aversion
  drug interaction
  pharmacological antagonism
Antiemetic effects, 437
  antiaversive effects
  aversive effects
  conditioned taste aversion
  drug interaction
  opioid receptor agonists
Antimuricidal effect, 123
  p-chlorophenylalanine
  dorsal raphe nucleus
  lesions, dorsal raphe nucleus
  lesions, electrolytic
  lesions, median raphe nucleus
  median raphe nucleus
  mouse killing behavior
  serotonin-mimetic drugs
  serotonin neurotransmission
Antipsychotic drugs, 399
  body weight
  caloric intake
  D2 receptors
  dose-dependent effects

long term administration
male/female comparisons
Anxiety, 171
buspirone
conflict behavior
diazepam
drug comparisons
phenobarbital
punished responding
unpunished responding
Anxiolytic agents, 239
exploratory behavior
subchronic treatment
withdrawal
Apparatus
Alzet osmotic pump, 199
Digiscan Animal Activity Monitor, 545, 553, 565, 573, 583, 569
inhalation chamber, 653
radial maze, 483, 625
Stone maze, 407
treadmill, 159
Area postrema, 677
amphetamines
combined treatment
conditioned taste aversion
radiation
Ascorbic acid levels, 231
amphetamine
haloperidol
in vivo
uric acid levels
Attack, 641
aggression
attack inhibition
ethanol
Attack inhibition, 641
aggression
attack
ethanol
Audiogenic seizures, 443
hypocalcemia
magnesium deficiency
potassium levels
Automated behavior observation, 559
pattern analysis
Automated monitor, 565
behavioral measures
reliabilities
spontaneous motor activity
time course
Autonomic thermoregulation, 431
ambient temperature
amphetamine
behavioral thermoregulation
Autoshaping, 307
desglycinamide arginine vasopressin
learning/memory
lever-touch response
scopolamine
Aversive effects, 437
antiaversive effects
antiemetic effects
conditioned taste aversion
drug interaction
opioid receptor agonists

Barbiturates, 391
benzodiazepines
drug reinforcement
human/monkey/rodent comparisons
route of administration
self-administration
Bar-pressing, 463
dopamine agents
drinking
schedule-induced polydipsia
water deprivation
Behavioral changes, 407
open field activity
organophosphate exposure
T-maze learning
Behavioral genetics
caffeine, 451
DMCM, 451
ethanol stimulation, 577
hyporesponsiveness, 451
inbred mice, 451
open field, 577
pharmacogenetics, 577
seizures, caffeine-induced, 451
selective breeding, 577
Behavioral measures, 565
automated monitor
reliabilities
spontaneous motor activity
time course
Behavioral sensitivity, 99
diazepam
long-term effects
pentylenetetrazol
stress
Behavioral thermoregulation, 431
ambient temperature
amphetamine
autonomic thermoregulation
Benzodiazepine receptor agonist, 35
benzodiazepine receptor antagonist
gastric ulcers, stress-induced
Benzodiazepine receptor antagonist, 35
benzodiazepine receptor agonist
gastric ulcers, stress-induced
Benzodiazepine receptors, 425
hypertonic saline intake
rehydration
Benzodiazepines, 391
barbiturates
drug reinforcement
human/monkey/rodent comparisons
route of administration
self-administration
B-HT 920, 283
B-HT 933
clonidine
differential effects
drug comparisons
locomotor activity
wall-climbing
B-HT 933, 283
B-HT 920
clonidine
differential effects
drug comparisons
locomotor activity
wall-climbing
Bin analysis, 497
5-HT antagonists
5-HT receptors
lesions, 5,7-dihydroxytryptamine
locomotor activity
motor habituation
Biogenic amine concentrations, 257
catecholamine depletion
chicks
food intake
6-hydroxydopamine
Blood serum cholinesterase, 199
osmotic pump
premature release
pyridostigmine
Body weight
age differences, 7
amytriptyline, 105
antipsychotic drugs, 399
caloric intake, 399
chronic administration, 105
D2 receptors, 399
desipramine, 105
dose-dependent effects, 399
food intake, 105
long term administration, 399
male/female comparisons, 399
nipple attachment, 7
serotonin, 7
tricyclic antidepressants, 105
Brain
amygdala, 113, 407
anterior hypothalamus, 177
anteromedial caudate nucleus, 113
aria postrema, 113, 677
brainstem, 257, 355, 685
caudate, 231
caudate-putamen, 457
cerebellum, 217, 355, 665
cortex, 143, 217, 355, 491, 505, 619, 723
dorsal raphe nucleus, 123
forebrain, 153
frontal cortex, 635
hindbrain, 143
hippocampus, 143, 217, 355, 407, 491, 505, 619, 635
hypothalamus, 143, 177, 183, 257, 291, 355, 619, 685, 715
lateral hypothalamus, 521, 693
medial frontal cortex, 113
medial prefrontal cortex, 15, 693
median forebrain bundle, 177
median raphe nucleus, 45, 123
midbrain, 143, 355
nucleus accumbens, 113, 177, 183, 685
olfactory tubercule, 177
paraventricular nucleus, 177, 291
perifornical area, 177
piriform cortex, 407
posterior nucleus of the hypothalamus, 177
prefrontal cortex, 685
septum, 685
stria medullaris, 183
striatum, 53, 143, 183, 257, 355, 491, 533, 583
substantia nigra, 457
suprachiasmatic nucleus, 177
thalamus, 407
vasa differentia, 227
ventral tegmental area, 457
ventrolateral caudate nucleus, 113
ventrolateral hypothalamus, 177
ventromedial nucleus of the hypothalamus, 177
zona incerta, 183
Brain extract, 537
intraperitoneal injection
paradoxical sleep inducing factor

Brain 5-HT levels, 619
diazepam
plasma corticosterone
stress
Brain monoamines, 317
alcohol preference
inbred strains
Buspirone, 171
anxiety
conflict behavior
diazepam
drug comparisons
phenobarbital
punished responding
unpunished responding

Ca channels, 227
diabetics
hyperactivity
vasa deferentia
Caffeine, 451
behavioral genetics
DMCM
hyporesponsiveness
inbred mice
seizures, caffeine-induced
Calcitonin
anatomical mapping, 177
anorexia, 177
hypothalamus, 177
intracerebral infusions, 183
locomotor activity, drug-induced, 183
Calcium antagonists, 217
cat brain
electroconvulsive shock
[^{3}H]nitrendipine binding
Caloric intake, 399
antipsychotic drugs
body weight
D2 receptors
dose-dependent effects
long term administration
male/female comparisons
Castration
adiposity, 223
chemical delivery system, 265
chickens, 223
copulation, 265
estradiol, 265
sex differences, 223
strain differences, 223
testosterone, 223
Cat brain, 217
calcium antagonists
electroconvulsive shock
[^{3}H]nitrendipine binding
Catalepsy
analgesia, 611
conditioned avoidance behavior, 57
dopamine turnover, 159
estrogen, 611
haloperidol, 159
hyperactivity, 611
locomotor activity, 159
morphine, 611
ovariectomy, 611
repeated testing, 159
treadmill, 159
Catecholamine depletion, 257
biogenic amine concentrations
chicks
food intake
6-hydroxydopamine
Catecholamine neurotransmitter, 715
2-deoxy-D-glucose
food deprivation
lateral hypothalamus
norepinephrine release
satiety
Central nervous system, 323
depressants
drug interactions
mice/rat comparisons
phencyclidine
Central nervous system depression, 745
ethanol
muscimol
sleep time
Cerebellum, mouse, 665
chloride channels
ethanol treatments
in vitro
Cerebral catecholamine systems, 685
corticotropin-releasing factor
stress
Chemical delivery system, 265
castration
copulation
estradiol
Chicken
adiposity, 223
biogenic amine concentrations, 257
castration, 223
catecholamine depletion, 257
food intake, 25, 257
6-hydroxydopamine, 257
opioid antagonists, 25
sex differences, 223
strain differences, 223
testosterone, 223
water intake, 25
Chloride channels, 665
cerebellum, mouse
ethanol treatments
in vitro
p-Chlorophenylalanine, 123
antimuricidal effect
dorsal raphe nucleus
lesions, dorsal raphe nucleus
lesions, electrolytic
lesions, median raphe nucleus
median raphe nucleus
mouse killing behavior
serotonin-mimetic drugs
serotonin neurotransmission
Choline uptake, 635
classical conditioning
microwaves
tolerance
Cholinergics, 81
anticholinergics
conditioned taste aversion
drug interaction
pharmacological antagonism
Chronic administration, 105
amytriptyline
body weight
desipramine
food intake
tricyclic antidepressants
Chronic consumption, 333
ethanol
growth
lactation
mammary gland composition
metabolism
milk composition
milk production
Chronic treatment, 143
diisopropylfluorophosphate
muscarinic binding
spatial learning
Circadian rhythms, 413
cortisol
human studies
mood ratings
stress
urine secretion
Classical conditioning, 635
choline uptake
microwaves
tolerance
Clonidine
B-HT 920, 283
B-HT 933, 283
consummatory negative contrast, 659
differential effects, 283
drug comparisons, 283
locomotor activity, 283
novel environment, 659
stress, 659
wall-climbing, 283
CNS stimulants, 299
DRL performance
lethality
"look-alike" stimulants
stimulant interaction
Cocaine, 533
dopamine release
sensitization
Cognitive tasks, 273
diazepam
human studies, elderly adults
neuromotor skills
pharmacodynamics
Cold-water swim analgesia, 525
naloxone, chronic
morphine analgesia
Combined treatment
amphetamines, 677
area postrema, 677
conditioned taste aversion, 671, 677
lithium chloride, 671
radiation, 671, 677
Conditioned analgesia, 529
endogenous opioids
quaternary naltrexone
stress-induced analgesia
Conditioned avoidance behavior, 159
catalepsy
dopamine turnover
haloperidol
locomotor activity
repeated testing
treadmill
Conditioned taste aversion
amphetamines, 677
antiaversive effects, 437
anticholinergics, 81
antiemetic effects, 437
area postrema, 677
aversive effects, 437
cholinergics, 81
combined treatment, 671, 677
drug interaction, 81, 437

feed refusal, 247
food consumption, 247
lithium chloride, 671, 677
opioid receptor agonists, 437
pharmacological antagonism, 81
radiation, 671, 677
saccharin, 247
vomitoxin, 247
Conflict behavior, 171
anxiety
buspirone
diazepam
drug comparisons
phenobarbital
punished responding
unpunished responding
Consummatory behaviors, 341
anhedonia
motor deficit
neuroleptics
operant behaviors
Consummatory negative contrast, 659
clonidine
novel environment
stress
Continuous reinforcement, 205
amphetamine
extinction
nonreinforcement
partial reinforcement
Controlling factors, 367
drug reinforcement
operant behavior
self-administration
Copulation, 265
castration
chemical delivery system
estradiol
Corticotropin-releasing factor, 685
cerebral catecholamine systems
stress
Cortisol, 413
circadian rhythms
human studies
mood ratings
stress
urine secretion

D2 receptors, 399
antipsychotic drugs
body weight
caloric intake
dose-dependent effects
long term administration
male/female comparisons
Data management, 545
age differences
locomotor activity
microcomputer
Day-night nociception, 477
locomotor activity
opiate agonists
sex differences
2-Deoxy-D-glucose
anorectic drugs, 291
catecholamine neurotransmitter, 715
deprivation-induced feeding, 291
food deprivation, 715
glucoprivic-feeding, 291
lateral hypothalamus, 715
norepinephrine release, 715
satiety, 715
site of action, 291
Depolarization-dependent Ca^{2+} uptake, 355
ethanol preference
neurotransmission
Depressants, 323
central nervous system
drug interactions
mice/rat comparisons
phencyclidine
Deprivation-induced feeding, 291
anorectic drugs
2-deoxy-D-glucose
glucoprivic-feeding
site of action
Desglycinamide arginine vasopressin, 307
autoshaping
learning/memory
lever-touch response
scopolamine
Desipramine, 105
amytriptyline
body weight
chronic administration
food intake
tricyclic antidepressants
Diabetics, 227
Ca channels
hyperactivity
vasa deferentia
Diazepam
anxiety, 171
behavioral sensitivity, 99
brain 5-HT levels, 619
buspirone, 171
cognitive tasks, 273
conflict behavior, 171
drug comparisons, 171
human studies, elderly adults, 273
long-term effects, 99
neuromotor skills, 273
pentylenetetrazol, 99
pharmacodynamics, 273
phenobarbital, 171
plasma corticosterone, 619
punished responding, 171
stress, 99, 619
unpunished responding, 171
Dietary fat, 1
food intake regulation
macronutrient selection
monoamine oxidase
serotonin metabolism
Diethylpropion, 749
acoustic startle
fenfluramine
phentermine
phenylpropanolamine
Differential effects, 283
B-HT 920
B-HT 933
clonidine
drug comparisons
locomotor activity
wall-climbing
Digiscan activity, 569
emotionality
locomotor activity
stereotypic behavior measurement
thigmotactic measurement
Diisopropylfluorophosphate, 143
chronic treatment
muscarinic binding
spatial learning
DMCM, 451
behavioral genetics
caffeine
hyporesponsiveness
inbred mice
seizures caffeine-induced
Dopamine, 93
estrogen
inhibitory mechanisms
lordosis
serotonin
Dopamine agents, 463
bar-pressing
drinking
schedule-induced polydipsia
water deprivation
Dopamine-receptor blockade, 521
pimozide
stimulation-induced feeding
Dopamine receptors, 629
dopamine behavior
hypophysectomy
Dopamine release, 533
cocaine
sensitization
Dopamine turnover, 159
catalepsy
conditioned avoidance behavior
haloperidol
locomotor activity
repeated testing
treadmill
Dopaminergic behavior, 629
dopamine receptors
hypophysectomy
Dopaminergic substrate, 649
d-amphetamine
l-amphetamine
drug comparisons
food intake
Dopaminergic system, 457
analgesia
lesions, electrical
morphine
U-50,488H
Dorsal raphe nucleus, 123
antimuricidal effect
p-chlorophenylalanine
lesions, dorsal raphe nucleus
lesions, electrolytic
lesions, median raphe nucleus
median raphe nucleus
mouse killing behavior
serotonin-mimetic drugs
serotonin neurotransmission
Dose-dependent effects
antipsychotic drugs, 399
body weight, 399
caloric intake, 399
D2 receptors, 399
drug comparisons, 733
fixed consecutive number responding, 733
kappa opioids, 733
long term administration, 399
male/female comparisons, 399
mu opioids, 733
sigma opioids, 733

Dose response, 573
  locomotor activity
  radioprotection
  time relationship
  WR-2721
Drinking
  bar-pressing, 463
  dopamine agents, 463
  schedule-induced polydipsia, 463
  water deprivation, 463
DRL performance, 299
  CNS stimulants
  lethality
  "look-alike" stimulants
  stimulant interaction
Drug
  N-allylnormetazocine, 733
  (±) N-allylnormetazocine, 73
  amphetamine, 61, 113, 183, 205, 231, 291, 431, 569
  d-amphetamine, 165, 513, 649, 707, 733
  l-amphetamine, 649
  amytriptyline, 105
  aniracetam, 491
  AP7, 553
  apomorphine, 93, 437, 463
  atropine methyl nitrate, 81
  atropine sulfate, 81
  benactyzine hydrochloride, 81
  betaxolol, 21
  B-HT 920, 283
  B-HT 933, 283
  bremazocine, 73, 437
  buprenarphine, 733
  buspirone, 171, 425
  caffeine, 451
  carbamylcholine, 723
  CGS 8216, 425
  CGS 9895, 425
  CGS 9896, 425
  CGS 19755, 553
  chlordiazepoxide, 35
  p-chlorophenylalanine, 45, 123
  cinanserin, 497
  cis-flupenthixol, 341
  citalopram, 123
  CL 218,872, 425
  clenbuterol, 21
  clonidine, 283, 659
  cocaine, 533
  copper sulphate, 437
  CPP, 553
  d-cyclazocine, 733
  2-deoxy-D-glucose, 105, 291, 715
  desipramine, 105
  desmethylimipramine, 7
  diazepam, 99, 171, 239, 273, 619
  diethylpropion, 749
  diisopropylfluorophosphate, 143
  DMCM, 451
  domperidone, 437
  estradiol, 265
  ethanol, 15, 235, 323, 333, 355, 379, 421, 517, 577, 641, 645, 665, 745
  ethylketocyclozacine, 437, 733
  exifone, 253
  fenfluramine, 45, 291, 749
  fentanyl, 437
  FG 7142, 35, 425
  fluoxetine, 123
  haloperidol, 93, 159, 231, 283, 341, 399, 463
  heroin, 693
  8-hydroxy-2-(di-n-propylamin)tetraline hydrobromide, 123
  8-hydroxy-2-(di-*n*-propylamino) tetralin, 625
  6-hydroxydopamine, 257
  ICI 118,551, 21
  ICI 154,129, 47
  idebenone, 351
  imipramine, 187, 359
  ketamine, 553
  ketanserin, 497, 701
  ketocyclazocine, 73
  lisuride, 93, 211
  lithium chloride, 437, 671
  LSD, 625
  mazindol, 291
  5-MeO-DMT, 625
  methadone, 437
  l-methadone, 73
  methamphetamine, 193
  3,4-methylenedioxymethamphetamine, 41
  methylphenidate, 513
  methiotepin, 93
  5-methoxy-N-N-dimethyl-tryptamine, 123
  metoclopramide, 165, 341
  morphine, 73, 87, 193, 437, 457, 611, 733
  muscimol, 45, 665, 745
  naloxone, 25, 73, 87, 525, 685
  naltrexone, 25, 529
  nicotine, 15, 505
  oxiracetam, 491
  oxotremorine, 723
  pargyline, 257
  pentobarbital, 323
  pentylenetetrazol, 99
  phencyclidine, 73, 323, 385
  phenobarbital, 171
  phentermine, 749
  phenylpropanolamine, 749
  physostigmine salicylate, 81
  pimozide, 67, 521
  (−)-pindolol, 93
  pipamperone, 497
  piracetam, 253
  pirenperone, 93, 497
  propranolol, 35, 291
  pyridostigmine, 199
  pyridostigmine bromide, 81
  quinpirole, 93
  quipazine, 701
  reserpine, 21
  ritanserin, 497
  RO15-4513, 517
  Ro16-6028, 425
  Ro17-1812, 425
  RU 2496, 625
  RU24969, 497
  scopolamine, 253, 307, 483, 491, 569
  soman, 407
  sulpiride, 165, 239, 341, 399
  TAG, 235
  taurine, 235
  TFMPP, 625
  thioridazine, 399
  tiapride, 239
  trifluoperazine, 399
  U-50,488, 73, 477
  U-50,488H, 457
  vomitoxin, 247
  WR-2721, 573
  xylene, 653
  ZK 91296, 425
  ZK 93426, 35
Drug comparisons
  d-amphetamine, 649
  l-amphetamine, 649
  anxiety, 171
  buspirone, 171
  B-HT 920, 283
  B-HT 933, 283
  clonidine, 283
  conflict behavior, 171
  diazepam, 171
  differential effects, 283
  dopaminergic substrate, 649
  dose-dependent effects, 733
  fixed consecutive number responding, 73, 733
  food intake, 649
  kappa opioids, 733
  locomotor activity, 283
  methamphetamine, 193
  morphine, 193
  motor activity, horizontal, 193
  motor activity, vertical, 193
  mu opioids, 733
  naloxone, 73
  opiate agonists, 73
  phenobarbital, 171
  punished responding, 171
  rate of responding, 73
  sigma opioids, 733
  unpunished responding, 171
  wall climbing, 283
Drug discrimination, 41
  isomeric comparisons
  3,4-methylenedioxymethamphetamine, 41
  time-course
Drug interactions
  acetylcholine release, 491
  amnesia, 491
  d-amphetamine, 165
  aniracetam, 491
  antiaversive effects, 437
  anticholinergics, 81
  antiemetic effects, 437
  aversive effects, 437
  central nervous system, 323
  cholinergics, 81
  conditioned taste aversion, 81, 437
  depressants, 323
  ethanol, 235
  hypermotility, 165
  metoclopramide, 165
  mice/rat comparisons, 323
  opioid receptor agonists, 437
  oxiracetam, 491
  pharmacological antagonism, 81
  phencyclidine, 323
  route of administration, 165
  scopolamine, 491
  sleeptime, 235
  stereotypy, 165
  TAG, 235
  taurine, 235
Drug reinforcement
  animal models, 385
  barbiturates, 391
  benzodiazepines, 391

controlling factors, 367
human/monkey/rodent comparisons, 391
operant behavior, 367
phencyclidine, 385
phencyclinoids, 385
route of administration, 391
self-administration, 385, 391

EEG-EMG addiction model, 373
opioid self-administration
pharmacodynamic characteristics
pharmacokinetic characteristics
Ejaculation, 187
erection
horses, males
imipramine
masturbation
route of administration
sexual behavior, male horses
Electroconvulsive shock, 217
calcium antagonists
cat brain
[^{3}H]nitrendipine binding
Emotionality, 569
Digiscan activity
locomotor activity
stereotypic behavior measurement
thigmotactic measurement
Endogenous opioids, 529
conditional analgesia
quaternary naltrexone
stress-induced analgesia
Enriched rearing, 153
forebrain
6-hydroxydopamine
isolation rearing
neurobehavioral plasticity
norepinephrine
Environment-specific conditioning, 61
amphetamine
horizontal activity
sensitization
vertical activity
Environmental factors, 379
ethanol self-administration
genetic factors
strain differences
Erection, 187
ejaculation
horses, males
imipramine
masturbation
route of administration
sexual behavior, males horses
Estradiol
castration, 265
chemical delivery system, 265
copulation, 265
estrous cycle, 53
footfaults, 53
lisuride, 211
lordosis, 211
ovariectomy, 53, 211
precopulatory patterns, 211
rats, females, 211
sensorimotor performance, 53
sexual behavior, 211
striatum, 53
Estrogen
analgesia, 611
catalepsy, 611
dopamine, 93
hyperactivity, 611
inhibitory mechanisms, 93
lordosis, 93
morphine, 611
ovariectomy, 611
serotonin, 93
Estrous cycle, 53
estradiol
footfaults
ovariectomy
sensorimotor performance
striatum
Ethanol
aggression, 641
aggression, female, 645
attack, 641
attack inhibition, 641
central nervous system depression, 745
chronic consumption, 333
drug interaction, 235
growth, 333
intracranial self-stimulation, 15
lactation, 333
mammary gland composition, 333
medial prefrontal cortex, 15
metabolism, 333
milk composition, 333
milk production, 333
muscimol, 745
nicotine, 15
opponent size, 645
sleep time, 235, 745
TAG, 235
taurine, 235
Ethanol preference, 355
depolarization-dependent Ca^{2+} uptake
neurotransmission
Ethanol reinforcement, 517
Ro15-4513
self-administration
Ethanol self-administration, 379
environmental factors
genetic factors
strain differences
Ethanol stimulation
behavioral genetics, 577
inbred mice, 421
light/dark environment, 421
motor activity, 421
open field, 577
pharmacogenetics, 577
selective breeding, 577
Ethanol treatments, 665
cerebellum, mouse
chloride channels
in vitro
Exifone, 253
exploratory behavior
passive avoidance
rodent memory models
scopolamine-induced amnesia
Exploratory behavior
ambulation, 359
anxiolytic agents, 239
exifone, 253
grooming, 359
imipramine, chronic, 359
novel environment, 359
passive avoidance, 253
rodent memory models, 253
scopolamine-induced amnesia, 253
social isolation, 359
subchronic treatment, 239
withdrawal, 239
Extinction, 205
amphetamine
continuous reinforcement
nonreinforcement
partial reinforcement

Feed refusal, 247
conditioned taste aversion
food consumption
saccharin
vomitoxin
Fenfluramine, 749
acoustic startle
diethylpropion
phentermine
phenylpropanolamine
Fixed-consecutive-number schedule
dose-dependent effects, 733
drug comparisons, 73, 733
kappa opioids, 733
mu opioids, 733
naloxone, 73
opiate agonists, 73
rate of responding, 73
sigma opioids, 733
Fixed ratio responding, 653
tolerance
xylene inhalation
Food competition, 707
d-amphetamine
rats, males
Food consumption, 247
conditioned taste aversion
feed refusal
saccharin
vomitoxin
Food deprivation, 715
catecholamine neurotransmitter
2-deoxy-D-glucose
lateral hypothalamus
norepinephrine release
satiety
Food intake
d-amphetamine, 649
l-amphetamine, 649
amytriptyline, 105
biogenic amine concentrations, 257
body weight, 105
catecholamine depletion, 257
chickens, 257
chicks, 25
chronic administration, 105
desipramine, 105
dopaminergic substrate, 649
drug comparisons, 649
6-hydroxydopamine, 257
opioid antagonists, 25
tricyclic antidepressants, 105
water intake, 25
Food intake regulation, 1
dietary fat
macronutrient selection
monoamine oxidase
serotonin metabolism
Footfaults, 53
estradiol
estrous cycle

ovariectomy
sensorimotor performance
striatum
Forebrain, 153
enriched rearing
6-hydroxydopamine
isolation rearing
neurobehavioral plasticity
norepinephrine

Gastric ulcers, stress-induced, 35
benzodiazepine receptor agonist
benzodiazepine receptor antagonist
Genetic analysis, 87
hypothermia
morphine
naloxone
strain differences
Genetic factors, 379
environmental factors
ethanol self-administration
strain differences
Gerbils, 553
locomotor activity
N-methyl-D-aspartate
Glucoprivic-feeding, 291
anorectic drugs
2-deoxy-D-glucose
deprivation-induced feeding
site of action
Grooming, 359
ambulation
exploratory behavior
imipramine, chronic
novel environment
social isolation
Growth, 333
chronic consumption
ethanol
lactation
mammary gland composition
metabolism
milk composition
milk production

Haloperidol
amphetamine, 231
ascorbic acid levels, 231
catalepsy, 159
conditioned avoidance behavior, 159
dopamine turnover, 159
in vivo, 231
locomotor activity, 159
repeated testing, 159
treadmill, 159
uric acid levels, 231
Heroin, 693
lateral hypothalamus
opiate antagonists
self-administration
Horizontal activity, 61
amphetamine
environment-specific conditioning
sensitization
vertical activity
Hormone
estradiol, 53, 93, 211, 223
estrogen, 53, 93, 611
insulin, 715
norepinephrine, 153
testosterone propionate, 223
Horses, male, 189
ejaculation
erection
imipramine
masturbation
route of administration
sexual behavior, male horses
5-HT antagonists, 497
bin analysis
5-HT receptors
lesions, 5,7-dihydroxytryptamine
locomotor activity
motor habituation
5-HT receptors
bin analysis, 497
5-HT antagonists, 497
lesions, 5,7-dihydroxytryptamine, 497
locomotor activity, 497
memory, 625
motor habituation, 497
radial maze, 625
serotonergic agonists, 625
Human/monkey/rodent comparisons, 391
barbiturates
benzodiazepines
drug reinforcement
route of administration
self-administration
Human studies, 413
circadian rhythms
cortisol
mood ratings
stress
urine secretion
Human studies, elderly adults, 273
cognitive tasks
diazepam
neuromotor skills
pharmacodynamics
6-Hydroxydopamine
biogenic amine concentrations, 257
catecholamine depletion, 257
chicks, 257
enriched rearing, 153
food intake, 257
forebrain, 153
isolation rearing, 153
neurobehavioral plasticity, 153
norepinephrine, 153
Hyperactivity
analgesia, 611
Ca channels, 227
catalepsy, 611
diabetics, 227
estrogen, 611
median raphe nucleus, 45
morphine, 611
muscimol, 45
ovariectomy, 611
serotonin, 45
vasa deferentia, 227
Hypermotility, 165
d-amphetamine
drug interactions
metoclopramide
route of administration
stereotypy
Hypertonic saline intake, 425
benzodiazepine receptors
rehydration

Hypocalcemia, 443
audiogenic seizures
magnesium deficiency
potassium levels
Hypophysectomy, 629
dopamine behavior
dopamine receptors
Hyporesponsiveness, 451
behavioral genetics
caffeine
DMCM
inbred mice
seizures, caffeine-induced
Hypothalamus, 177
anatomical mapping
anorexia
calcitonin
Hypothermia
β1 adrenergic receptors, 21
β2 adrenergic receptors, 21
genetic analysis, 87
morphine, 87
naloxone, 87
reserpine, 21
strain differences, 87

Idebenone, 351
lesions, midbrain raphe nuclei
muricide
olfactory bulbectomy
Imipramine, 187
ejaculation
erection
horses, males
masturbation
route of administration
sexual behavior, male horses
Imipramine, chronic, 359
ambulation
exploratory behavior
grooming
novel environment
social isolation
Inbred mice
behavioral genetics, 451
caffeine, 451
DMCM, 451
ethanol stimulation, 421
hyporesponsiveness, 451
light/dark environment, 421
motor activity, 421
seizures, caffeine-induced, 451
Inbred strains, 317
alcohol preference
brain monoamines
Inhibitory mechanisms, 93
dopamine
estrogen
lordosis
serotonin
Intracerebral infusions, 183
calcitonin
locomotor activity, drug-induced
Intracranial administration, 113
amphetamine
open field
stereotyped behavior
Intracranial self-stimulation, 15
ethanol
medial prefrontal cortex
nicotine

Intraperitoneal injection, 537
brain extract
paradoxical sleep inducing factor
In vitro, 665
cerebellum, mouse
chloride channels
ethanol treatments
In vivo, 231
amphetamine
ascorbic acid levels
haloperidol
uric acid levels
Isolation rearing, 153
enriched rearing
forebrain
6-hydroxydopamine
neurobehavioral plasticity
norepinephrine
Isomeric comparisons, 41
drug discrimination
3,4-methylenedioxymethamphetamine
time-course

Kappa opioids, 733
dose-dependent effects
drug comparisons
fixed consecutive number responding
mu opioids
sigma opioids

Lactation, 333
chronic consumption
ethanol
growth
mammary gland composition
metabolism
milk composition
milk production
Lateral hypothalamus
catecholamine neurotransmitter, 715
2-deoxy-D-glucose, 715
food deprivation, 715
heroin, 693
norepinephrine release, 715
opiate antagonists, 693
satiety, 715
self-administration, 693
Learning/memory, 307
autoshaping
desglycinamide arginine vasopressin
lever-touch response
scopolamine
Learning performance, 133
$ACTH_{4-10}$
long-term effects
neonatal exposure
Lesions, 5,7-dihydroxytryptamine, 497
bin analysis
5-HT antagonists
5-HT receptors
locomotor activity
motor habituation
Lesions, dorsal raphe nucleus, 123
antimuricidal effect
p-chlorophenylalanine
dorsal raphe nucleus
lesions, electrolytic
lesions, median raphe nucleus
median raphe nucleus
mouse killing behavior
serotonin-mimetic drugs
serotonin neurotransmission
Lesions, electrical, 457
analgesia
dopaminergic system
morphine
U-50,488H
Lesions, electrolytic, 123
antimuricidal effect
p-chlorophenylalanine
dorsal raphe nucleus
lesions, dorsal raphe nucleus
lesions, median raphe nucleus
median raphe nucleus
mouse killing behavior
serotonin-mimetic drugs
serotonin neurotransmission
Lesions, median raphe nucleus, 123
antimuricidal effect
p-chlorophenylalanine
dorsal raphe nucleus
lesions, dorsal raphe nucleus
lesions, electrolytic
median raphe nucleus
mouse killing behavior
serotonin-mimetic drugs
serotonin neurotransmission
Lesions, midbrain raphe nuclei, 351
idebenone
muricide
olfactory bulbectomy
Lethality, 299
CNS stimulants
DRL performance
"look-alike" stimulants
stimulant interaction
Lever pressing, 67
anhedonia
pimozide
rats, nondeprived
sucrose reward
Lever-touch response, 307
autoshaping
desglycinamide arginine vasopressin
learning/memory
scopolamine
Light/dark environment, 421
ethanol stimulation
inbred mice
motor activity
Lisuride, 211
estradiol
lordosis
ovariectomy
precopulatory patterns
rats, females
sexual behavior
Lithium chloride, 671
combined treatment
conditioned taste aversion
radiation
Locomotor activity
age differences, 545
bin analysis, 497
B-HT 920, 283
B-HT 933, 283
catalepsy, 159
clonidine, 283
conditioned avoidance behavior, 159
data management, 545
day-night nociception, 477
differential effects, 283
Digiscan activity, 569
dopamine turnover, 159
dose response, 573
drug comparisons, 283
emotionality, 569
gerbils, 553
haloperidol, 159
5-HT antagonists, 497
5-HT receptors, 497
lesions, 5,7-dihydroxytryptamine, 497
N-methyl-D-aspartate, 553
microcomputer, 545
motor habituation, 497
neural transplantation, 583
opiate agonists, 477
radioprotection, 573
repeated testing, 159
sex differences, 477
stereotypic behavior measurement, 569
striatum, 583
thigmotactic measurement, 569
time relationship, 573
treadmill, 159
wall climbing, 283
WR-2721, 573
Locomotor activity, drug-induced, 183
calcitonin
intracerebral infusions
Long-term administration, 399
antipsychotic drugs
body weight
caloric intake
D2 receptors
dose-dependent effects
male/female comparisons
Long-term effects
$ACTH_{4-10}$, 133
behavioral sensitivity, 99
diazepam, 99
learning performance, 133
neonatal exposure, 133
pentylenetetrazol, 99
stress, 99
"Look-alike" stimulants, 299
CNS stimulants
DRL performance
lethality
stimulant interaction
Lordosis
dopamine, 93
estradiol, 211
estrogen, 93
inhibitory mechanisms, 93
lisuride, 211
ovariectomy, 211
precopulatory patterns, 211
rats, females, 211
serotonin, 93
sexual behavior, 211

Macronutrient selection, 1
dietary fat
food intake regulation
monoamine oxidase
serotonin metabolism
Magnesium deficiency, 443
audiogenic seizures
hypocalcemia
potassium levels

Male/female comparisons, 399
antipsychotic drugs
body weight
caloric intake
D2 receptors
dose-dependent effects
long term administration
Mammary gland composition, 333
chronic consumption
ethanol
growth
lactation
metabolism
milk composition
milk production
Masturbation, 187
ejaculation
erection
horses, males
imipramine
route of administration
sexual behavior, male horses
Medial prefrontal cortex, 15
ethanol
intracranial self-stimulation
nicotine
Median raphe nucleus
antimuricidal effect, 123
p-chlorophenylalanine, 123
dorsal raphe nucleus, 123
hyperactivity, 45
lesions, dorsal raphe nucleus, 123
lesions, electrolytic, 123
lesions, median raphe nucleus, 123
mouse killing behavior, 123
muscimol, 45
serotonin, 45
serotonin-mimetic drugs, 123
serotonin neurotransmission, 123
Memory, 625
5-HT receptors
radial maze
serotonergic agonists
Metabolism, 333
chronic consumption
ethanol
growth
lactation
mammary gland composition
milk composition
milk production
Methamphetamine, 193
drug comparisons
morphine
motor activity, horizontal
motor activity, vertical
Method
gas chromatography, 491
Hebb-William maze, 153
isobolographic analysis, 323
Lashley maze, 153
lever press, 513
voltammetry, 231
N-Methyl-D-aspartate, 553
gerbils
locomotor activity
3,4-Methylenedioxymethamphetamine, 41
drug discrimination
isomeric comparisons
time-course
Methylphenidate, 513
d-amphetamine
timing
Metoclopramide, 165
d-amphetamine
drug interactions
hypermotility
route of administration
stereotypy
Mice/rat comparisons, 323
central nervous system
depressants
drug interactions
phencyclidine
Microcomputer, 545
age differences
data management
locomotor activity
Microwaves, 635
choline uptake
classical conditioning
tolerance
Milk composition, 333
chronic consumption
ethanol
growth
lactation
mammary gland composition
metabolism
milk production
Milk production, 333
chronic consumption
ethanol
growth
lactation
mammary gland composition
metabolism
milk composition
Monkeys, dominant, 701
monkeys, subordinate
serotonin receptor sites
Monkeys, subordinate, 701
monkeys, dominant
serotonin receptor sites
Monoamine oxidase, 1
dietary fat
food intake regulation
macronutrient selection
serotonin metabolism
Mood ratings, 413
circadian rhythms
cortisol
human studies
stress
urine secretion
Morphine
analgesia, 457, 611
catalepsy, 611
dopaminergic system, 457
drug comparisons, 193
estrogen, 611
genetic analysis, 87
hyperactivity, 611
hypothermia, 87
lesions, electrical, 457
methamphetamine, 193
motor activity, horizontal, 193
motor activity, vertical, 193
naloxone, 87
ovariectomy, 611
strain differences, 87
U-50,488H, 457
Morphine analgesia, 525
cold-water swim analgesia
naloxone, chronic
Motor activity, 421
ethanol stimulation
inbred mice
light/dark environment
Motor activity, horizontal, 193
drug comparisons
methamphetamine
morphine
motor activity, vertical
Motor activity, vertical, 193
drug comparisons
methamphetamine
morphine
motor activity, horizontal
Motor deficit, 341
anhedonia
consummatory behaviors
neuroleptics
operant behaviors
Motor habituation, 497
bin analysis
5-HT antagonists
5-HT receptors
lesions, 5,7-dihydroxytryptamine
locomotor activity
Mu opioids, 733
dose-dependent effects
drug comparisons
fixed consecutive number responding
kappa opioids
sigma opioids
Muricide
antimuricidal effect, 123
p-chlorophenylalanine, 123
dorsal raphe nucleus, 123
idebenone, 351
lesions, dorsal raphe nucleus, 123
lesions, electrolytic, 123
lesions, median raphe nucleus, 123
lesions, midbrain raphe nuclei, 351
median raphe nucleus, 123
olfactory bulbectomy, 351
serotonin-mimetic drugs, 123
serotonin neurotransmission, 123
Muscarinic binding, 143
chronic treatment
diisopropylfluorophosphate
spatial learning
Muscarinic receptor levels, 723
oxotremorine, chronic
strain differences
tolerance
Muscimol
central nervous system depression, 745
ethanol, 745
hyperactivity, 45
median raphe nucleus, 45
serotonin, 45
sleep time, 745

Naloxone
drug comparisons, 73
fixed-consecutive number schedule, 73
genetic analysis, 87
hypothermia, 87
morphine, 87
opiate agonists, 73

rate of responding, 73
strain differences, 87
Naloxone, chronic, 525
cold-water swim analgesia
morphine anagesia
Neonatal exposure, 133
$ACTH_{4-10}$
learning performance
long-term effects
Neural transplantation, 583
locomotor activity
striatum
Neurobehavioral plasticity, 153
enriched rearing
forebrain
6-hydroxydopamine
isolation rearing
norepinephrine
Neuroleptics, 341
anhedonia
consummatory behaviors
motor deficit
operant behaviors
Neuromotor skills, 273
cognitive tasks
diazepam
human studies, elderly adults
pharmacodynamics
Neurotransmission, 355
depolarization-dependent Ca^{2+} uptake
ethanol preference
Nicotine
ethanol, 15
intracranial self-stimulation, 15
medial prefrontal cortex, 15
receptor levels, 505
tolerance development, 505
Nipple attachment, 7
age differences
body weight
serotonin
[^{3}H]Nitrendipine binding, 217
calcium antagonists
cat brain
electroconvulsive shock
Nonreinforcement, 205
amphetamine
continuous reinforcement
extinction
partial reinforcement
Norepinephrine, 153
enriched rearing
forebrain
6-hydroxydopamine
isolation rearing
neurobehavioral plasticity
Norepinephrine release, 715
catecholamine neurotransmitter
2-deoxy-D-glucose
food deprivation
lateral hypothalamus
satiety
Novel environment
ambulation, 359
clonidine, 659
consummatory negative contrast, 659
exploratory behavior, 359
grooming, 359
imipramine, chronic, 359
social isolation, 359
stress, 659
Olfactory bulbectomy, 351
idebenone
lesions, midbrain raphe nuclei
muricide
Open field activity
amphetamine, 113
behavioral changes, 407
behavioral genetics, 577
ethanol stimulation, 577
intracranial administration, 113
organophosphate exposure, 407
pharmacogenetics, 577
selective breeding, 577
stereotyped behavior, 113
T-maze learning, 407
Operant behaviors
anhedonia, 341
consummatory behaviors, 341
controlling factors, 367
drug reinforcement, 367
motor deficit, 341
neuroleptics, 341
self-administration, 367
Opiate agonists
day-night nociception, 477
drug comparisons, 73
fixed-consecutive number schedule, 73
locomotor activity, 477
naloxone, 73
rate of responding, 73
sex differences, 477
Opiate antagonists, 693
heroin
lateral hypothalamus
self-administration
Opioid antagonists, 25
chickens
food intake
water intake
Opioid receptor agonists, 437
antiaversive effects
antiemetic effects
aversive effects
conditioned taste aversion
drug interaction
Opioid self-administration, 373
EEG-EMG addiction model
pharmacodynamic characteristics
pharmacokinetic characteristics
Opponent size, 645
aggression, female
ethanol
Organophosphate exposure, 407
behavioral changes
open field activity
T-maze learning
Osmotic pump, 199
blood serum cholinesterase
premature release
pyridostigmine
Ovariectomy
analgesia, 611
catalepsy, 611
estradiol, 53, 211
estrogen, 611
estrous cycle, 53
footfaults, 53
hyperactivity, 611
lisuride, 211
lordosis, 211
morphine, 611
precopulatory patterns, 211
rats, females, 211
sensorimotor performance, 53
sexual behavior, 211
striatum, 53
Oxiracetam, 491
acetylcholine release
amnesia
aniracetam
drug interactions
scopolamine
Oxotremorine, chronic, 723
muscarinic receptor levels
strain differences
tolerance

Paradoxical sleep inducing factor, 537
brain extract
intraperitoneal injection
Partial reinforcement, 205
amphetamine
continuous reinforcement
extinction
nonreinforcement
Passive avoidance, 253
exifone
exploratory behavior
rodent memory models
scopolamine-induced amnesia
Pattern analysis, 559
automated behavior observation
Pentylenetetrazol, 99
behavioral sensitivity
diazepam
long-term effects
stress
Peptide
$ACTH_{4-10}$, 133
calcitonin, 177, 183
corticotropin-releasing factor, 685
desglycinamide arginine vasopressin, 307
[D-Ala^2, Met^5]enkephalinamide, 437
[Leu^5]enpehalin, 437
serotonin, 45
Pharmacodynamic characteristics, 373
EEG-EMG addiction model
opioid self-administration
pharmacokinetic characteristics
Pharmacodynamics, 273
cognitive tasks
diazepam
human studies, elderly adults
Pharmacogenetics, 577
behavioral genetics
ethanol stimulation
open field
selective breeding
Pharmacokinetic characteristics, 373
EEG-EMG addiction model
opioid self-administration
pharmacodynamic characteristics
Pharmacological antagonism, 81
anticholinergics
cholinergics
conditioned taste aversion
drug interaction
Phencyclidine
animal models, 385
central nervous system, 323
depressants, 323
drug interactions, 323

drug reinforcement, 385
mice/rat comparisons, 323
phencyclinoids, 385
self-administration, intravneous, 385
Phencyclinoids, 385
animal models
drug reinforcement
phencyclidine
self-administration, intravenous
Phenobarbital, 171
anxiety
buspirone
conflict behavior
diazepam
drug comparisons
punished responding
unpunished responding
Phentermine, 749
acoustic startle
diethylpropion
fenfluramine
phenylpropanolamine
Phenylpropanolamine, 749
acoustic startle
diethylpropion
fenfluramine
phentermine
Pimozide
anhedonia, 67
dopamine-receptor blockade, 521
lever pressing, 67
rats, nondeprived, 67
stimulation-induced feeding, 521
sucrose reward, 67
Plasma corticosterone, 619
brain 5-HT levels
diazepam
stress
Potassium-levels, 443
audiogenic seizures
hypocalcemia
magnesium deficiency
Precopulatory patterns, 211
estradiol
lisuride
lordosis
ovariectomy
rats, females
sexual behavior
Premature release, 199
blood serum cholinesterase
osmotic pump
pyridostigmine
Punished responding, 171
anxiety
buspirone
conflict behavior
diazepam
drug comparisons
phenobarbital
unpunished responding
Pyridostigmine, 199
blood serum cholinesterase
osmotic pump
premature release

Quaternary naltrexone, 529
conditioned analgesia
endogenous opioids
stress-induced analgesia

Radial maze performance
acquisition, 483
5-HT receptors, 625
memory, 625
scopolamine, 483
serotonergic agonists, 625
spatial memory, 483
strain differences, 483
Radiation
amphetamines, 677
area postrema, 677
combined treatment, 671, 677
conditioned taste aversion, 671, 677
lithium chloride, 671
Radioprotection, 573
dose response
locomotor activity
time relationship
WR-2721
Rate of responding, 73
drug comparisons
fixed-consecutive-number schedule
naloxone
opiate agonists
Rats, female, 211
estradiol
lisuride
lordosis
ovariectomy
precopulatory patterns
sexual behavior
Rats, male, 707
d-amphetamine
food competition
Rats, nondeprived, 67
anhedonia
lever pressing
pimozide
sucrose reward
Receptor levels, 505
nicotine
tolerance development
Rehydration, 425
benzodiazepine receptors
hypertonic saline intake
Reliabilities, 565
automated monitor
behavioral measures
spontaneous motor activity
time course
Repeated testing, 159
catalepsy
conditioned avoidance behavior
dopamine turnover
haloperidol
locomotor activity
treadmill
Reserpine, 21
β1 adrenergic receptors
β2 adrenergic receptors
hypothermia
RO15-4513, 517
ethanol reinforcement
self-administration
Rodent memory models, 253
exifone
exploratory behavior
passive avoidance
scopolamine-induced amnesia
Route of administration
d-amphetamine, 165
barbiturates, 391
benzodiazepines, 391
drug interactions, 165
drug reinforcement, 391
ejaculation, 187
erection, 187
horses, males, 187
human/monkey/rodent comparisons, 391
hypermotility, 165
imipramine, 187
masturbation, 187
metoclopramide, 165
self-administration, 391
sexual behavior, male horses, 187
stereotypy, 165

Saccharin, 247
conditioned taste aversion
feed refusal
food consumption
vomitoxin
Satiety, 715
catecholamine neurotransmitter
2-deoxy-D-glucose
food deprivation
lateral hypothalamus
norepinephrine release
Schedule-induced polydipsia, 463
bar-pressing
dopamine agents
drinking
water deprivation
Scopolamine
acetylcholine release, 491
acquisition, 483
amnesia, 491
aniracetam, 491
autoshaping, 307
desglycinamide arginine vasopressin, 307
drug interactions, 491
learning/memory, 307
lever-touch response, 307
oxiracetam, 491
radial maze performance, 483
spatial memory, 483
strain differences, 483
Scopolamine-induced amnesia, 253
exifone
exploratory behavior
passive avoidance
rodent memory models
Seizures, caffeine-induced, 451
behavioral genetics
caffeine
DMCM
hyporesponsiveness
inbred mice
Selective breeding, 577
behavioral genetics
ethanol stimulation
open field
pharmacogenetics
Self-administration
barbiturates, 391
benzodiazepines, 391
controlling factors, 367
drug reinforcement, 367, 391
ethanol reinforcement, 517
heroin, 693

human/monkey/rodent comparisons, 391
lateral hypothalamus, 693
operant behavior, 367
opiate antagonists, 693
RO15-4513, 517
route of administration, 391
Self-administration, intravenous, 385
animal models
drug reinforcement
phencyclidine
phencyclinoids
Sensitization
amphetamine, 61
cocaine, 533
dopamine release, 533
environment-specific conditioning, 61
horizontal activity, 61
vertical activity, 61
Sensorimotor performance, 53
estradiol
estrous cycle
footfaults
ovariectomy
striatum
Serotonin
age differences, 7
body weight, 7
dopamine, 93
estrogen, 93
hyperactivity, 45
inhibitory mechanisms, 93
lordosis, 93
median raphe nucleus, 45
muscimol, 45
nipple attachment, 7
Serotonergic agonists, 625
5-HT receptors
memory
radial maze
Serotonin metabolism, 1
dietary fat
food intake regulation
macronutrient selection
monoamine oxidase
Serotonin-mimetic drugs, 123
antimuricidal effect
p-chlorophenylalanine
dorsal raphe nucleus
lesions, dorsal raphe nucleus
lesions, electrolytic
lesions, median raphe nucleus
lesions, electrolytic
lesions, median raphe nucleus
median raphe nucleus
mouse killing behavior
serotonin neurotranmission
Serotonin neurotransmission, 123
antimuricidal effect
p-chlorophenylalanine
dorsal raphe nucleus
lesions, dorsal raphe nucleus
lesions, electrolytic
lesions, median raphe nucleus
median raphe nucleus
mouse killing behavior
serotonin-mimetic drugs
Serotonin receptor sites, 701
monkeys, dominant
monkeys, subordinate
Sex differences
adiposity, 223
castration, 223
chickens, 223
day-night nociception, 477
locomotor activity, 477
opiate agonists, 477
strain differences, 223
testosterone, 223
Sexual behavior, 211
estradiol
lisuride
lordosis
ovariectomy
precopulatory behavior
rats, females
Sexual behavior, male horses, 187
ejaculation
erection
horses, males
imipramine
masturbation
route of administration
Sigma opioids, 733
dose-dependent effects
drug comparisons
fixed consecutive number responding
kappa opioids
mu opioids
Site of action, 291
anorectic drugs
2-deoxy-D-glucose
deprivation-induced feeding
glucoprivic-feeding
Sleep time
central nervous system depression, 745
drug interaction, 235
ethanol, 235, 745
muscimol, 745
TAG, 235
taurine, 235
Social isolation, 359
ambulation
exploratory behavior
grooming
imipramine, chronic
novel environment
Spatial learning, 143
chronic treatment
diisopropylfluorophosphate
muscarinic binding
Spatial memory, 483
acquisition
radial maze performance
scopolamine
strain differences
Spontaneous motor activity, 565
automated monitor
behavioral measures
reliabilities
time course
Stereotyped behavior
amphetamine, 113
d-amphetamine, 165
drug interactions, 165
hypermotility, 165
intracranial administration, 113
metoclopramide, 165
open field, 113
route of administration, 165
Stereotypic behavior measurement, 569
Digiscan activity
emotionality
locomotor activity
thigmotactic measurement
Stimulant interaction, 299
CNS stimulants
DRL performance
lethality
"look-alike" stimulants
Stimulation-induced feeding, 521
dopamine-receptor blockade
pimozide
Strain differences
acquisition, 483
adiposity, 223
castration, 223
chickens, 223
environmental factors, 379
ethanol self-administration, 379
genetic analysis, 87
genetic factors, 379
hypothermia, 87
morphine, 87
muscarinic receptor levels, 723
naloxone, 87
oxotremorine, chronic, 723
radial maze performance, 483
scopolamine, 483
sex differences, 223
spatial memory, 483
testosterone, 223
tolerance, 723
Stress
behavioral sensitivity, 99
brain 5-HT levels, 619
cerebral catecholamine systems, 685
circadian rhythms, 413
clonidine, 659
consummatory negative contrast, 659
corticotropin-releasing factor, 685
cortisol, 413
diazepam, 99, 619
human studies, 413
long-term effects, 99
mood ratings, 413
novel environment, 659
pentylenetetrazol, 99
plasma corticosterone, 619
urine secretion, 413
Stress-induced analgesia, 529
conditioned analgesia
endogenous opioids
quaternary naltrexone
Striatum
estradiol, 53
estrous cycle, 53
footfaults, 53
locomotor activity, 583
neural transplantation, 583
ovariectomy, 53
sensorimotor performance, 53
Subchronic treatment, 239
anxiolytic agents
exploratory behavior
withdrawal
Sucrose reward, 67
anhedonia
lever pressing
pimozide
rats, nondeprived

TAG, 235
drug interaction

ethanol
sleep time
taurine
Taurine, 235
drug interaction
ethanol
sleep time
TAG
Testosterone, 223
adiposity
castration
chickens
sex differences
strain differences
Thigmotactic measurement, 569
Digiscan activity
emotionality
locomotor activity
stereotypic behavior measurement
Time course
automated monitor, 565
behavioral measures, 565
drug discrimination, 41
isomeric comparisons, 41
3,4-methylenedioxymethamphetamine, 41
reliabilities, 565
spontaneous motor activity, 565
Time relationship, 573
dose response
locomotor activity
radio protection
WR-2721
Timing, 513
d-amphetamine
methylphenidate
T-maze learning, 407
behavioral changes
open field activity
organophosphate exposure
Tolerance
choline uptake, 635
classical conditioning, 635
fixed ratio responding, 653
microwaves, 635
muscarinic receptor levels, 723
nicotine, 505
oxotremorine, chronic, 723
receptor levels, 505
strain differences, 723
xylene inhalation, 653
Treadmill, 159
catalepsy
conditioned avoidance behavior
dopamine turnover
haloperidol
locomotor activity
repeated testing
Tricyclic antidepressants, 105
amytriptyline
body weight
chronic administration
desipramine
food intake

U-50,488H, 457
analgesia
dopaminergic system
lesions, electrical
morphine
Unpunished responding, 171
anxiety
buspirone
conflict behavior
diazepam
drug comparisons
phenobarbital
punished responding
Uric acid levels, 231
amphetamine
ascorbic acid levels
haloperidol
in vivo
Urine secretion, 413
circadian rhythms
cortisol
human studies
mood ratings
stress

Vasa deferentia, 227
Ca channels
diabetics
hyperactivity
Vertical activity, 61
amphetamine
environment-specific conditioning
horizontal activity
sensitization
Vomitoxin, 247
conditioned taste aversion
feed refusal
food consumption
saccharin

Wall-climbing, 283
B-HT 920
B-HT 933
clonidine
differential effects
drug comparisons
locomotor activity
Water deprivation, 463
bar pressing
dopamine agents
drinking
schedule-induced polydipsia
Water intake, 25
chickens
food intake
opioid antagonists
Withdrawal, 239
anxiolytic agents
exploratory behavior
subchronic treatment
WR-2721, 573
dose response
locomotor activity
radio protection
time relationship

Xylene inhalation, 653
fixed ratio responding
tolerance

AUTHOR INDEX

Abla, K. A., 451
Ahlenius, S., 93, 159
Allan, A. M., 665
Allen, J. D., 463
Anderson, W. R., 265
Angel, I., 291
Arregui-Aguirre, A., 15
Asin, K. E., 45
Ator, N. A., 391
Avril, I., 253

Bacher, J., 217
Balfour, D. J. K., 619
Balster, R. L., 323
Baptista, T., 399
Barry, J. M., 239
Bassett, J. R., 413
Becker, J. B., 53
Beckwith, B. E. 133
Bednarik, E. J., 569
Beninger, R. J., 61
Bercovitz, H., 205
Berka, C., 133
Berridge, C. W., 685
Bird, D. C., 299
Blanchard, D. C., 641, 645
Blanchard, R. J., 641, 645
Blancquaert, J.-P., 437
Boast, C. A., 543, 553
Bodnar, R. J., 525
Bodor, N., 265
Boggan, W. O., 421
Bolger, G. T., 217
Bozarth, M. A., 521
Brammer, G. L., 701
Breese, G. S., 513
Brewster, M. E., 265
Bronson, M. E., 733
Bushnell, P. J., 431
Calcagnetti, D. J., 529
Carney, J. M., 451
Carr, G. D., 113
Chaistitwanich, R., 443
Chen, C. H., 193
Chou, C. K., 635
Ciesielski, L., 123
Clancy, A. N., 133
Clark, D. E., 247
Claro-Izaguirre, F., 15
Collins, A. C., 505, 723
Commissaris, R. L., 171
Cooper, S. J., 425
Copeland, R. L., Jr., 653
Copland, A. M., 619
Corrigall, W. A., 693
Coscina, D. V., 105
Costall, B., 239
Crabbe, J. C., 577
Craft, R. M., 165
Crane, S. B., 1
Crawley, J. N., 291

Davidson, T. L., 99
Davis, H. D., 573
de Beaurepaire, R., 177, 183
Demetrikopoulos, M. K., 659
Denbow, D. M., 25
Doumont, G., 253
Deutsch, C. M., 577
Dominitz, J. A., 573
Dubow, D., 273
Dunn, A. J., 685
Dykstra, L. A., 73

Eckerman, D. A., 513
Ellinwood, E. H., Jr., 273
Evans, K. R., 649

Fan, T., 355

Fanselow, M. S., 529
Feldon, J., 205
Ferko, A. P., 235, 745
Fernández-Guasti, A., 93
Finnefrock, J. A., 569
Flaherty, C. F., 659
Flannelly, K., 645
Forster, M. J., 545
Fowler, C. J., 159
Fowler, S. C., 67
Francès, H., 21
Freed, W. J., 177, 183

Garcia, M. C., 187
George, F. R., 365, 379
Ghosh, T. K., 653
Ginter, H., 35
Gobaille, S., 123
Goñi-Garrido, M. J., 15
Goodlett, C. R., 283
Gordon, C. J., 431
Gramling, S. E., 67
Greenwood, C. E., 1
Griffiths, R. R., 391
Grigson, P. S., 659
Gurson, D. B., 569
Guy, A. W., 635
Gvaryahu, G., 223

Hagenmeyer-Houser, S. H., 583
Hall, J., 641, 645
Harkabus, L. J., 569
Harris, R. A., 665
Hartgraves, S. L., 199
Harvey, R. B., 247
Haskett, C., 231
Heatherly, D. G., 273
Heise, J. W., 73
Helmstetter, F. J., 529
Hendricks, D. G., 443
Hernandez, L., 399
Herrera, E., 333
Higashida, A., 483
Hillegaart, V., 159
Hjorth, S., 93
Hliňák, Z., 211
Holloway, F. A., 299
Honda, H., 227
Hopper, D. L., 559
Hori, K., 641, 645
Horita, A., 635
Howard, J. L., 165
Hruska, R. E., 629
Huerta, P. L., 299
Hughes, R. N., 359
Hughey, D., 407
Hunt, W. A., 671, 677

Ings, R., 153
Innes, D. G. L., 477
Inturrisi, C. E., 525
Isaac, L., 217
Isel, F., 123
Itoh, T., 193
Iwamoto, E. T., 307

Jappay, E., 497
Jenks, J. A., 569
Jenuwine, M. J., 53

Kato, R., 87
Kavaliers, M., 477
Kazandjian, A., 611
Kelly, M. E., 239
Kenney, R. M., 187
Kerenyi, S. Z., 199
Kernan, W. J., Jr., 559
Kest, B., 525
Khazan, N., 365, 373
King, J. M., 81
Klitenick, M. A., 45
Komura, S., 317
Kosobud, A., 577
Kreider, M., 7
Kuenzel, W. J., 257
Kutscher, C. L., 749

LaForest, A. R., 569
Lai, H., 635
Landauer, M. R., 573
Larsson, K., 93
Lee, [illegible] 671, 677
Lefebvre, R. A., 437
Lenègre, A., 253
Lerma, M. S., 247
Leshem, M., 7
Lewis, R. M., 707
Ljungberg, T., 341
Lucki, I., 99

McCloskey, T. C., 171
McCormack, J. F., 25
McDonnell, S. M., 187
McDonough, J., 407
McGivern, R. F., 133
McGuire, M. T., 701

MacRae, L. K., 565
Magnusson, O., 159
Mahoney, A. W., 443
Mandel, P., 123
Manning, S., 513
Marks, M. J., 505, 723
Marquis, K. L., 385
Masuda, Y., 193
Matthies, H., 537
Mattucci-Schiavone, L., 745
Mazurski, E. J., 61
Meisch, R. A., 367
Michaelis, R. C., 299
Middaugh, L. D., 421
Miller, M. M., 53
Mills, F. G., 517
Mitchell, J. A., 707
Mitchell, S. G., 569
Miyamoto, M., 351
Modrow, H., 407
Moerschbaecher, J. M., 733
Molina, V., 123
Mookherjee, S., 653
Moreton, J. E., 385

Morgado-Bernal, I., 15
Mueller, K., 231
Mullenix, P. J., 559
Mundy, W. R., 307
Murai, S., 193
Muraki, T., 87
Murtha, S., 153
Myers, R. D., 715

Nagaoka, A., 351
Nagy, R. P., 569
Naranjo, C. A., 355
Naylor, R. J., 239
Nikaido, A. M., 273
Nobrega, J. N., 105
Nomikos, G., 611

Ogawa, N., 483
Ohno, M., 457
Olton, D., 407
Ossenkopp, K.-P., 565

Pappas, B. A., 153
Parada, M., 399
Parui, R. N., 653
Pastor, G., 553
Paul, B. K., 171
Paul, S. M., 291
Peinado, J. M., 715
Pepeu, G., 491
Peris, J., 533
Petti, D. T., 625
Pfeffer, A. O., 517
Picker, M., 73
Pither, J. M., 359
Pollard, G. T., 165
Porsolt, R. D., 253
Pradhan, S. N., 653
Pranzatelli, M. R., 497

Rabin, B. M., 671, 677
Raffaele, K., 407
Raleigh, M. J., 701
Randall, C. L., 421
Remesar, X., 333
Rennert, O. M., 451
Rexroad, C. E., Jr., 257
Rhoads, K., 569
Robinzon, B., 223
Roderick, T. H., 451
Rohrbach, K. W., 165
Romano, J. A., 81
Romm, E., 723
Rose, G., 133
Rozenboim, I., 223

Saari, M., 153
Sadeghi, K. G., 517
Saito, H., 193
Sakai, Y., 227
Samson, H. H., 517
Sanberg, P. R., 543, 569, 583
Sandman, C. A., 133
Sayag, N., 223
Schechter, M. D., 41

Seale, T. W., 451
Segbefia, D., 513
Sfikakis, A., 611
Simon, P., 21
Simpkins, J. W., 265
Sisson, D. V., 443
Skolnick, P., 35
Smythe, J., 153
Snapir, N., 223, 257
Snodgrass, S. H., 463, 497
Snyder, P. J., 53
Spignoli, G., 491
Spillane, R., 413
Spyraki, C., 611
Stange, K., 153
Stark, H., 537
Stéru, L., 253
Stitzel, J. A., 505
Stivers, J. A., 291
Streather, A., 521

Tam, B. R., 577
Teskey, G. C., 565
Ticarich, C. D., 569
Tizzano, J. P., 67
Tolliver, G. A., 517
Truesdell, L. S., 525
Trullas, R., 35

Ueki, S., 457
Upchurch, M., 143

Vaccarino, F. J., 649
Valentino, M. L., 283
Van Arsdalen, K. N., 187
Vilaró, S., 333
Viñas, O., 333

Waxler, J., 223
Wehner, J. M., 143
Weiner, I., 205
Weiss, J. F., 573
Weissman, B. A., 217
Wellman, P. J., 247
Wenk, G., 407
Wessinger, W. D., 323
Westgate, S. A., 53
Wetzel, W., 537
White, N. M., 113
Willems, J. L., 437
Willis, R., 569
Wilson, M. C., 707
Winter, J. C., 625
Wirtshafter, D., 45
Wu, P. H., 355

Yamamoto, T., 457
Yoburn, B. C., 525
Yoshida, H., 187
Yoshimoto, K., 317
Young, E. R., 577
Young, G. A., 373

Zahnister, N. R., 533
Zárate-Oleaga, J. A., 15
Zoloty, S. A., 569